

## **REMARKS/ARGUMENTS**

Reconsideration and allowance of the above-identified application are respectfully requested. Upon entry of this Amendment, claims 1-43 will be pending.

Applicants would like to take this opportunity to thank the Examiner for meeting with the inventors during the interview conducted on Tuesday, December 13, 2005. The following will summarize the substance of the interview.

The Examiner agreed that the 1.131 declaration filed June 2, 2005 was effective to remove U.S. Published Patent Application No. 2004/0046021 to Chung. Accordingly, the rejections based on Chung are deemed to be overcome. The rejections based on Chung included claims 1-3 and 11-13 under 35 U.S.C. §102(e), claims 4-7, 10 and 14-17 under 35 U.S.C. §103(a), claims 18-23 under 35 U.S.C. §103(a), and claims 8-9 under 35 U.S.C. §103(a).

During the Interview Applicants demonstrated an exemplary embodiment of their invention. The system uses a scanner to generate a digital picture of a voted paper ballot. The system then analyzes the markings made on the voted paper ballot and generates vote data based on the analysis of the digital picture of the voted ballot. The vote data and the digital picture of the voted ballot are associated with one another so that a human can later review the digital picture of the voted ballot together with the vote data generated therefrom. The human reviewer can then make a determination of whether the generated vote data is appropriate based on a review of the digital picture of the voted ballot and a determination of the voter's actual intent. The Examiner agreed that McClure does not teach or suggest these features. McClure only stores vote data, which does not retain the

voter's intent in the same manner as markings appearing in the digital picture of the voted ballot. Applicants and the Examiner discussed McClure's misleading use of the term "ballot image" as will be discussed in greater detail below. In summary, McClure uses the term "ballot image" to refer *only* to the vote data associated with a particular ballot, and does not refer to a "picture" of the ballot.

Applicants and the Examiner briefly discussed claims 1 and 11. However, since the rejections of claims 1, 11 and the respective dependent claims were based only on Chung, and because Chung was removed as prior art based on the 131 Declaration submitted by Applicants, the Examiner agreed to conduct an update search. Applicants agreed to consider amending claims 1, 11 and the respective dependent claims, only if prior art is discovered which is read upon by the claims. Applicants requested that if any such prior art is located, that a non-final office action be issued in view of the extensive prosecution history of the present application, and the unnecessary extension of prosecution caused by the Examiner's misapplication of the McClure reference, which caused, among other things, the first non-final office action after the filing of the RCE in this case.

Applicants turn now to the remaining substantive rejection. Claims 24-43 stand rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 6,250,548 to McClure et al. Applicants respectfully submit that the Examiner has misapplied McClure due to a misleading term "ballot image" used throughout the reference. A superficial review of McClure reveals a description of absentee ballots being scanned, and "ballot images" being generated, which, applying 20-20 hindsight, bears similarity to the ballot pictures of the applicants invention. However, a more thorough review of McClure shows that

McClure never describes or suggests creating a “digital picture” of a voted ballot, as claimed in the present invention.

McClure consistently uses the term “ballot image” to refer to vote data only, and not a “picture” of a ballot. This is evident, for example, in FIG. 1 and the related description, in which “ballot images” are received not only from absentee ballots, but also from precinct voting tablets and internet voting. As described throughout the application, the precinct voting tablets and internet voting mechanism have no way of generating a “digital picture” of a ballot, but rather are *only* capable of generating vote data. At Col. 1, Lines 10-15, the description “[t]he present invention also relates to verifying that the voter’s ballot selection *displayed to the voter* is identical to the *ballot image* recorded electronically . . .” (emphasis added) makes it clear that the term “ballot image” is used to refer to vote data only, because the ballot selections displayed to the voter are displayed only as illuminated LED’s on the voting tablet (See, e.g., Col. 18, Lines 19-27: “The voting tablet 56 includes a matrix 99 of LED illuminated membrane switches 100 (tablet switches). When the ballot overlay 65 is placed on top of the voting tablet 56, graphical marks on the ballot overlay 65 are aligned with a particular set of tablet switches 100. To make a selection, the voter presses the graphical mark corresponding to the selection and the underlying switch 100 is activated. This activates an LED 102 associated with that particular switch 100 which, in turn, back lights the graphical mark selected.”; See also Col. 21, Lines 21-24: “Once the cast ballot switch is actuated, the selections made up to that point *become the voter’s ballot image* and any races where no selection has been made become a ‘no vote’”).

Further description reveals that the “ballot image” is generated by monitoring the status of *switches* (Col. 21, Lines 44-55: “The present invention provides for an independent means of producing and recording the ballot image. A proposed means for producing the independent ballot image is accomplished by monitoring the current or voltage to the LED 102 associated with each switch 100 on the voting tablet membrane switch matrix 99. The voting tablet 56 acknowledges the switch activation by issuing a command that turns on the corresponding switch LED 102, indicating to the voter that the selection has been made. Monitoring the current or voltage supplied to the LED 102 can be accomplished through several different approaches, three of which are described below.” Col. 22, Lines 48-50: “Once the state of the comparators 120 is known, the ballot image can be *constructed using the LED position information*”). The status of switches results in vote-data only, not a “picture” of a voted ballot including human-made markings that indicate the voter’s intent. Thus it is clear that the term “ballot image” as used in McClure refers only to data representing vote data.

The possibility of the term “ballot image” having a different meaning in the context of absentee ballots is foreclosed by McClure’s description of absentee ballot processing. First, at Col. 32, Lines 29-39, absentee ballot images are described as being “identical” to ballot images produced at voting tablets at the voting precincts (“The scanning software reads the positional information for the current image and compares the possible selections contained in the ballot style with the image of the marks made by the voter on the bottom sheet 184 of the absentee ballot 180. From this analyses, the scanning software produces (228) a ballot image, *identical to the ones produced in the precinct polling place when voting on a voting tablet 56*. The positional information

fetched from the ballot creation equates to a button pressed on a voting tablet 56 in the precinct polling place on election day.”).

The fact that absentee ballot images in McClure comprise vote data only is *by design*, so that vote data obtained from absentee ballots is intermixed with, and *indistinguishable* from the vote data obtained from the precinct voting tablets (Col. 33, Lines 62-63: “The absentee ballot images are randomly stored *with the ballot images recorded at the precinct polling place.*”).

Finally, McClure even describes “ballot images” obtained by internet voting as being indistinguishable from, and intermingled with absentee ballot images (see Col. 37, Lines 24-62: “The ballot, as viewed from the voter’s computer monitor, has a similar appearance as the absentee ballot 180 and, hence, the GBO 65. . . The voter is able to write-in and/or change their selections up until the cast ballot button is activated, just like the voting tablet. . . The Internet software, secure behind the firewall, decrypts the transmission and converts the responses of the voter into equivalent switch positions for the voting tablet. After verifying valid switch positions, as indicated for the voter’s ballot style, the Internet software *randomly saves the ballot image in a secure database* and flags the issue number as no longer valid. . . However, a jurisdiction may choose to disable the site in advance of election day *so that the ballot images from the Internet can be combined with the absentee ballot images* and delivered to the precinct in the MMU 58. This allows these ballot images to be counted at the precinct, a requirement for many jurisdictions.”).

Later in the specification, McClure defines “ballot image” to mean vote data only. “The primary ballot image is generated by a record of which switches 100 were selected

by the voter, then recorded, and then stored by the TNC 50.” (Col. 43, Lines 14-16). See also, Col. 43, Lines 48-54: “When the vote is stored, it is kept intact so that an exact replica of the cast vote could be reproduced should it be necessary. This is called a ballot ‘image’, *a term common to computer storage of data*, and is part of the audit trail that can be used in the event that some aspect of the election comes into question.”

From all of the above and other description found in McClure, it is clear that the term “ballot image” as used in McClure refers *only* to vote data, and as such, McClure does not describe or suggest generating a “digital picture” of a voted ballot, and generating vote data by analyzing markings on the voted ballot that indicate a voter’s intent, and storing the digital picture of the voted ballot, as claimed in claims 24 and 35. Accordingly, the rejections based on McClure should be withdrawn.

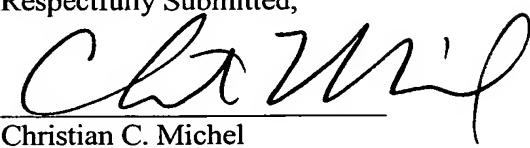
Claims 24 and 35, and respective dependent claims, have been amended to replace the term “computer readable visual representation” to “digital picture”. The amendment was made to clarify the distinction between the “digital picture” of a voted ballot that is created and analyzed according to embodiments of the present invention, and data-only “ballot images” according to McClure. Accordingly, to the extent that the term “computer readable visual representation” is interpreted to mean a “digital picture” the terms are meant to have the same meaning. However, the term digital picture was used based on the Examiner’s position that the term “computer readable visual representation” could read on the “data only” ballot image disclosed in McClure. Therefore Applicants intend for the term “digital picture” to be given broad meaning, to include any type of visual representation of a voted ballot with markings thereon that evidence the voter’s intent, such as, but not limited to, those created by a typical

document scanner. Typical digital picture formats in use today include .jpg, .tif, and .gif. Furthermore, the term "digital picture" should include any suitable picture data that can be analyzed by a computer, whether the picture data has been modified by image processing or not.

Finally, Applicants intend to include within the term "digital picture" any and all equivalents not reasonably foreseeable at this time, and no more than tangentially related to the reason for the amendment to include the term "digital picture" rather than "computer readable visual representation," which was solely to distinguish the "data only" system described in McClure.

In view of the above, it is believed that the application is in condition for allowance and notice to this effect is respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the telephone number indicated below.

Respectfully Submitted,

  
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